LETTERS TO THE EDITOR

Regarding "Subfascial endoscopic perforator vein surgery combined with saphenous vein ablation: Results and critical analysis"

I read with interest the article by Bianchi et al (J Vasc Surg 2003;38:67-71). Their data confirm the finding that subfascial endoscopic vein surgery (SEPS), combined with saphenous vein ablation, results in shorter and durable healing of leg ulcers.

However, there appear some confusing or alarming statements in the Results section:

- 1. "The SEPS procedure was uniformly performed in all cases as described previously."
- 2. "A mean of 3 (range, 1-7) perforating veins were ligated and divided at surgery."
- 3. "Perioperative complications occurred in 12 limbs (16%) and included wound infection (7 limbs), subfascial hematoma (3 limbs), abscess (1 limb), and superficial thrombophlebitis (1 limb). All complications occurred in limbs with C6 disease (P = .04)."

Regarding these three statements, I found the first two confusing, and the third alarming.

In fact, the first statement is wrong since, at least in the first 23 patients, SEPS was performed without accessing the deep posterior compartment. This suggests that in these cases incompetent perforating veins were certainly missed. In fact, in the second statement the authors affirm that only a mean of three (range 1-7) incompetent perforating veins were found and interrupted.

The third (and, from my point of view, alarming) statement regards the unacceptably high rate of complications—more than 20% (!) if we consider only limbs with C_6 disease. Overall, the high rate of infection for a "clean" surgical intervention (since the incision for the single port access is remote from the ulcer areas) should be regarded as a contraindication to the surgical treatment of C_6 chronic venous insufficiency patients.¹ Then, one could indicate for these patients medical treatment of the ulcers to be administered prior to surgery.

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REFERENCE

 Porter JM, Moneta GL. Reporting standards in venous disease: an update. International Consensus Committee on Chronic Venous Disease. J Vasc Surg 1995;21:635-45.

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Reply

We appreciate Dr. Rulli's comments and hope the following will answer his queries:

- The term "uniformly performed" meant only that subfascial endoscopic perforator vein surgery (SEPS) was performed by using a single port, open scope technique. We understand how one could be confused with that word choice since the deep posterior compartment was not accessed in the first 23 cases. Some incompetent perforating veins (IPVs) could have been missed by not exploring the deep posterior compartment. On the other hand, despite thorough exploration we sometimes find no IPVs to ligate in the deep posterior compartment.
- 2. Therefore, the number of ligated IPVs were reported as such.

3. We do not consider the SEPS procedure to be "clean" in the setting of an active venous ulcer and, as expected, the over-whelming majority of complications were superficial wound infections. We do not consider the threat of superficial wound infection to be a contraindication to surgical treatment. The other complications occurred early in our experience with the procedure, and now it is extremely unusual to have anything other than an occasional superficial wound infection complicate a SEPS procedure.

Thank you for the opportunity to clarify those issues.

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Regarding "Venous reflux repair with cryopreserved vein valves"

The timely article by Neglén and Raju (J Vasc Surg 2003;37: 552-7) describes their experience in treating deep venous reflux with cryopreserved vein implantation because repair with autogenous vein was not possible. They noted that, in a large number of patients with thrombophilia, the transplanted cryopreserved vein became occluded despite aggressive anticoagulation therapy. We were surprised that 74% of the supplied cryovalves were incompetent when thawed, requiring transcommisural repair before implantation.

To treat primary incompetence of the common femoral vein, we have used glutaraldehyde-preserved bovine pericardial monocusp patches, and more recently cryopreserved monocusp patches made from allograft pulmonary arteries.^{1,2} Even though these patients were not "thrombosis prone," none of our repairs has thrombosed.² The fundamental difference between our approach and that of Neglén and Raju is that we retain the posterior aspect of the patient's own vein. This concept originated after we repaired femoral veins damaged during extracorporeal membrane oxygenator support by patching them with polytetrafluoroethylene. Those repairs in which the posterior aspect of the patient's vein was retained remained patent without thrombosis. Patency was confirmed at duplex scanning and venography.

In patients with primary reflux in whom we have implanted glutaraldehyde-preserved monocusp patches of bovine pericardium or cryopreserved allograft pulmonary arteries, we do not use warfarin anticoagulation therapy. Our maintenance regimen is 75 mg of clopidogrel and 81 mg of aspirin, after a loading dose of 300 mg of clopidogrel. This is clearly an indicator that our group of patients is quite different from the "thrombosis-prone" patients described by Neglén and Raju.

It is important to note that the cause of venous ulceration was primary in more than 95% of our patients, which is different from what was noted in other reported series, in which there is a prevalence of deep venous valvular insufficiency secondary to venous thrombosis. Use of our technique for treatment of secondary deep venous valvular insufficiency will probably require a radically different type of anticoagulation protocol to overcome the tendency for development of thrombosis.

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